



BASE FROM U.S. GEOLOGICAL SURVEY, 1950

SCALE 1:25000

SCALE 1:250000

5 0 5 10 15 20 25 KILOMETERS

## EXPLANATION

**— Lineamen**

## LINEAMENT MAP

# LANDSAT FEATURES MAPS OF THE CIRCLE QUADRANGLE, ALASKA

b7

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This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards

## DISCUSSION

These maps are a presentation of numerous lineaments and circular and arcuate features observed on Landsat imagery of the Circle quadrangle. The method of lineament identification (depiction) used closely follows that employed by Raines (1978). Republication of these maps compiled with generalized geologic base maps (Helen Foster and others, unpub. data, 1981)---for utilization in a proposed interpretative report on the Landsat features shown herein---is planned as part of a folio of maps on the Circle quadrangle.

#### REFERENCES CITED

Albert, N.R.D., and Steele, W.C., 1976a, Interpretation of Landsat imagery of the McCarthy quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-773-N, scale 1:250,000. 3 sheets.

, 1976b, Interpretation of Landsat imagery of the Tanacross quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-767-C, scale 1:250,000, 3 sheets.

Condit, C.D., and Chavez, P.S., Jr., 1978, Basic concepts of computerized digital image processing for geologists: U.S. Geological Survey Bulletin 1462.

Raines, G.L., 1978, Porphyry copper exploration model for northern Sonora, Mexico: U.S. Geological Survey Journal of Research, v. 6, no. 1, p. 51-58.

## TABLE OF IMAGERY USED IN OBSERVATIONS

Image used for computer-enhancement and photo-optical enhancement is 2944-20083, taken August 23, 1977. Computer-compatible tapes were processed by Pat S. Chavez, Jr. and Ellen Sanchez, U.S. Geological Survey, Flagstaff, Arizona; descriptions of this type of enhancement (simulated natural color) are given in Albert and Steele (1976a, b) and Condit and Chavez (1978). Imagery is available from EROS Data Center, Sioux Falls, SD 57198 (specify PAO number when ordering). Example of imagery is shown in Figure 2.

IMAGE TYPE	COMPUTER-ENHANCED	BANDS AND COLORS USED	PROJECTION	PAO NUMBER	TRANSPARENCY SCALE	PRINT SCALE
Simulated natural color	Yes	4 Green 5 Red Syn Blue	Orthographic	E-796-67CT	1:1,070,000	1:250,000
False-color (POE)	No	4 Blue 5 Green 7 Red	Space Cylindrical	E-1222-99CT	1:1,070,000	1:250,000

POE = photo-optically enhanced



Figure 1. Map showing location of Landsat imagery used in observations of the Circle quadrangle.